

Challenge '99/2000

Digital signatures and encryption for business to business:

Messaging

Web access

Electronic commerce

Virtual Private Networking

Single sign-on

Proposition

To model and demonstrate a standards-based, secure, global environment which enables Electronic Business:

- A model PKI
- Multi-vendor
- Create and exchange information
 - Signed
 - Encrypted

Legacy

- X400
- X435
- Directory

Challenge History

- Directory Challenge wrap-up
- •EMA '98
- Management Team formed
- Documentation
- www.ema.org/challenge99/index.htm
- Work in progress

Vision

Move from small, island clusters of business exchange to a globally interoperable, standards-based, secure electronic commerce.

Business Oriented

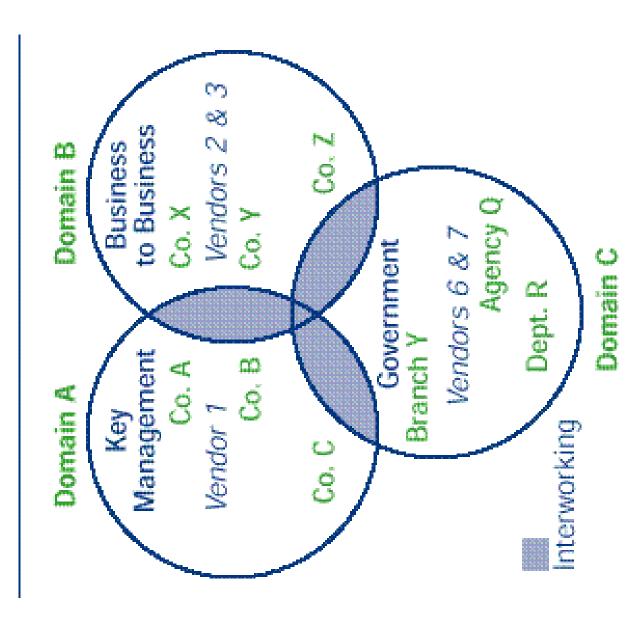
- Use PKI technology for critical business transactions
- Demonstrate capabilities to solve business problems
- Interoperability to assure business to business commerce

Method

- Model the environment
- Identify key issues
- Raise awareness
- Determine solutions
- Give insight with demonstrations

Scenarios

- Secure email & web access
- E-business/Financial/ERP
- Patent development
- Attorney/client
- Benefits administration
- Government services
- Aviation
- Akoos



Environment Overview

Problem Areas

Interworking of different products across classic security areas

- Identity
- Authority
- Integrity

- Confidentiality
- Privacy
- Trust

Issues

- How many keys?
- Identity vs. Authority
- Privacy
- Revocation models
- Virus Protection
- The "Onion"

- Personal vs. rolebased
- Portability
- Legal
- Liability
- Message Scanning

Desired Attributes

- Useful
- Scalable
- Manageable
- Fully functional
- Transparent to users
- Commercial off-the-shelf products

Promotion Campaign

- Educate participants
- Raise awareness
- Reveal multi-domain PKI issues
- Advance the learning curve

Concept of Operations

- Teaming alliances
 - Users, multiple CA, directory and messaging vendors
- Vertical industry orientations
- Cross-alliance interworking
- Lessons learned

Benefits

Breaking down the barriers to:

- Accountability
- Accuracy
- Agility
- Authentication
- Economy

- Extended Reach
- Privacy
- Security
- Single Sign On
- Streamlining

Users Wanted!

- Opportunity to influence product design
- Interoperation improvements
 - Partners, Suppliers & Customers
- A competitive advantage
- Define the Challenge

Vendors Wanted!

- 60% of medium/large enterprises are planning implementation within 2 years
- Users won't commit to a product until it demonstrates interoperability
- E-commerce market will explode after interworking is achieved
- A competitive advantage
- Define the Challenge

Current Participants

- Boeing
- British Telecom
- Xcert
- NTIS

- GSA
- US Treasury
- Ferris Research
- FTT Consultants

Strongly Committed

- Control Data
- Entrust
- Exxon
- GTE Cybertrust
- GTE Internetworking

- Lotus Development Corporation
- Siemens
- Time Warner
- Unilever

Interest Expressed

- APL
- ARINC
- Candle
- Charles Schwab
- DHL
- DOD/DISA
- Entegrity
- Fischer
- JC Penny,

- Kaiser Permanente
- Lockheed Martin
- Met Life
- Netegrity
- Nexor
- Nortel
- SendMail
- St John's University
- State of California

- TCI
- Texas Instruments
- Treasury Board of Canada
- University of North Texas
- US DOT
- Wingra
- WorldCom

For more information

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